

SEMICONDUCTOR DEVICE AND MANUFACTURE THEREOF

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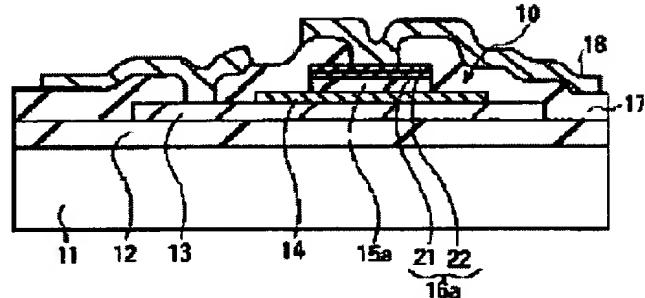


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Abstract of JP8274256

PURPOSE: To prevent the deterioration in characteristics caused by the oxidization of a capacitor electrode in a capacitor using an oxide dielectric film. **CONSTITUTION:** A SiO₂ film 12 and the first wiring layer 13 are provided on a GaAs substrate 11 in the above-mentioned order. A capacitor 10 is formed on the first wiring layer 13. The lower electrode 14 of the capacitor 10 has a multilayer structure consisting of a Ti layer/Mo layer/Pt layer in the order from the bottom side. The dielectric film 15 of the capacitor 10 consists of strontium titanate. The upper electrode 16a of the capacitor is multilayer constructed by a WN_x layer 21 (120nm)/a W-layer 22 (300nm) in the order from lower side. The surface of the upper electrode 16a, which comes in contact with the dielectric film 15a, is prescribed by a tungsten nitride layer 21.



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